Teacher Notes– THE DOCTORS SURGERY PART A.

Scenario

You have been asked to create a database for the East Berkshire Doctors Surgery. Currently all records are stored on a spreadsheet.

The surgery would like to be able to store and report on surgery visits. Currently staff have two types of speciality – GP and Nurse. The surgery would like to have doctors and nurses with more specialities in the future. The database will record information about:

- Staff
- Patients
- The appointments on a given day.

Each doctor must see at least one patient in a day.

A patient cannot see more than one doctor in a day.

An Appointment can be a single or a double session identified as 1 or 2.

There are two types of patient: Private and NHS. Privately funded patients are sent a bill of £50 for each visit to the Doctor.

A doctor cannot see more than 2 privately funded patients in a single day.

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General Information.

The activities presented here follow the style of the new 5 hour format for the Unit 2 NEA from Pearson.

This NEA style was created in a direct response to the instances of mass cheating and plagiarism that occurred under the old-style assessment where students had 10 hours to work on a single database. What happened was that student would go online to various forums and share the question paper or the answers.

To respond to this, Pearson has cut down the NEA to 5 hours.

In Part A students are required to build a database and create some simple queries and reports and carry out testing.

In Part B, students are **GIVEN** a brand new database and are required to create forms for this.

The days and times of the exams are set by Pearson and are no longer at the institution's discretion.

The idea is that is it now impossible for students to share answers online. The downside is that the amount of material for students to get through has been substantially reduced.

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Part A.

Activity 1

The idea behind the scenario is that:

- A doctor can have many patient appointments
- A patient can have many doctor appointments
- An appointment can only be for one doctor and one patient

This implies two One: Many relationships between doctor and appointment and patient and appointment

In addition, there is a requirement for new specialities to be added but that each doctor or nurse can still only have one speciality, so there is a 1:M link from the Staff table to the speciality table, however doing from speciality to Staff. The logic is that although a staff member can only have one speciality, that speciality might have many members of staff (e.g. there is more than one nurse)

Some students might spot a possible extra table of Patient Type linking as a 1:1 to Patient, but this is not required for this scenario as students can only use the columns and data supplied to them in the scenario

This scenario then assumes a 4 table ERD.

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Activity 2

This should be relatively straightforward.

The key is to

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